

CWSkimmer Server (WB4MAK)

This program captures all CW spots on seven bands simultaneously from my QTH in Alpharetta, GA (EM74uc). The advantage of this program is that if it's spotted, I can generally work it. Therefore I don't have as many unworkable spots from a world-wide spotting source. Feel free to use this program as another spotting source at your station. There are advanced instructions later in the document that describe how to aggregate spots from multiple sources like other multiple telnet sources and packet.

Please send all feedback positive/negative to wb4mak@nfarl.org .

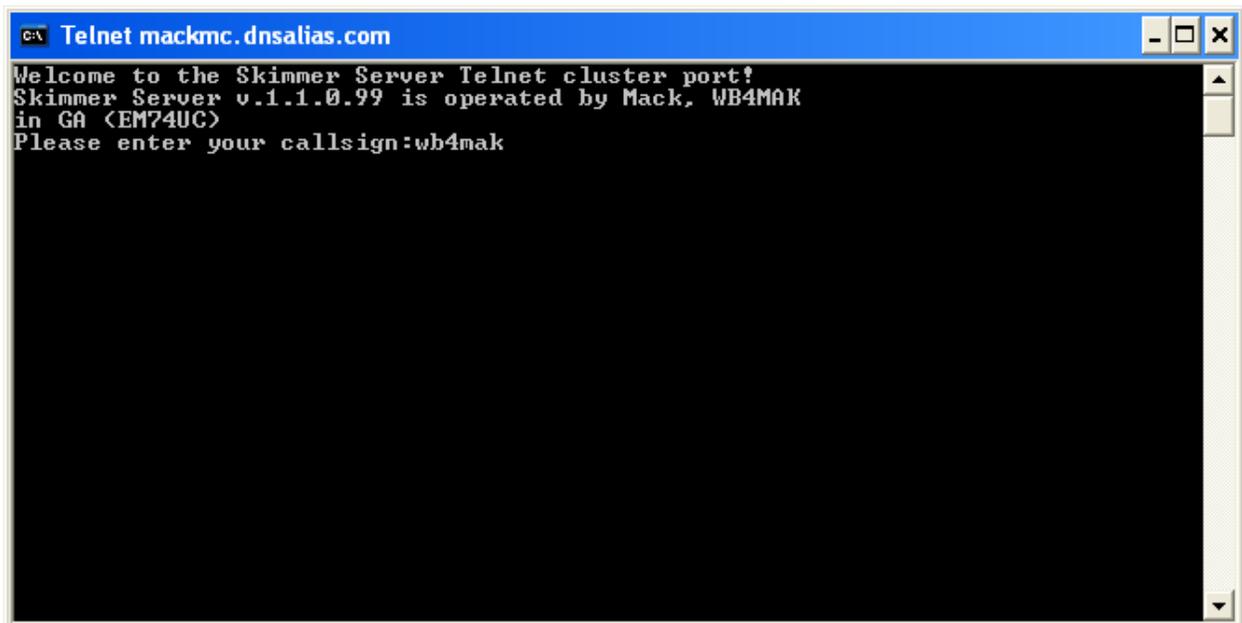
From your logging program please connect to **mackmc.dnsalias.com port 23**. NOTE: There is not an @ symbol in this name. This is a DNS alias pointing to the CWSkimmer Server. I am particularly interested to know if the spots are "off frequency" by more than say 100 Hz.

If you are unable to connect to the server from your logging program, you may troubleshoot by opening a command prompt.

Start | cmd | enter

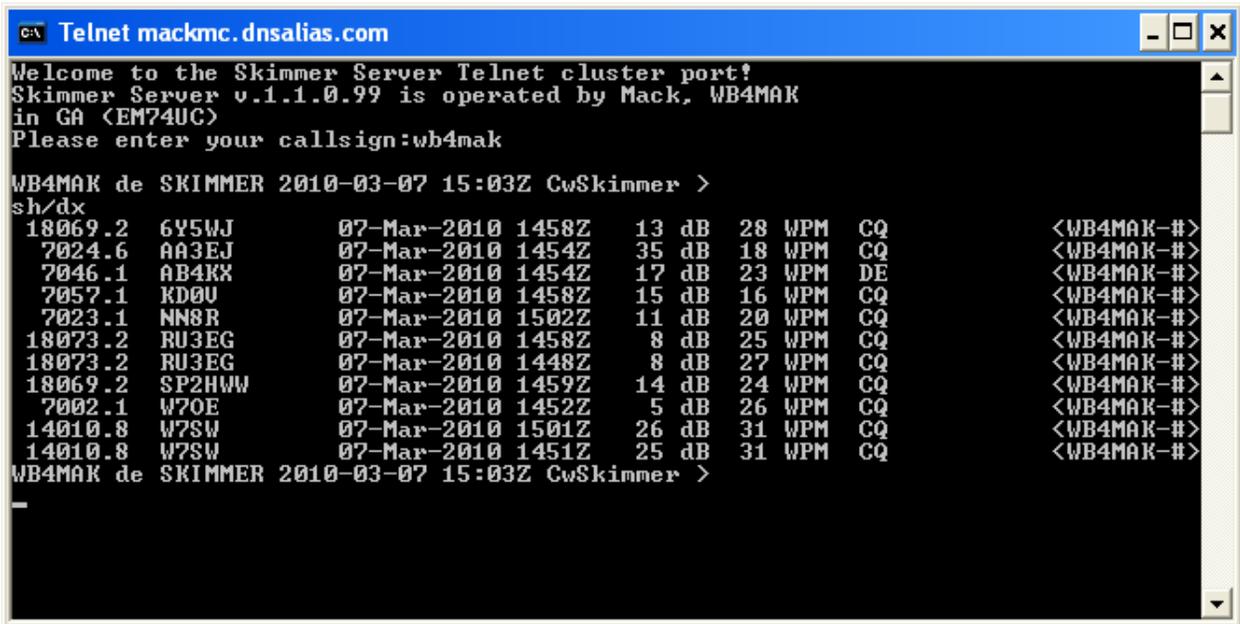
Type **telnet mackmc.dnsalias.com**

Enter **your callsign**



```
C:\> Telnet mackmc.dnsalias.com
Welcome to the Skimmer Server Telnet cluster port!
Skimmer Server v.1.1.0.99 is operated by Mack, WB4MAK
in GA (EM74UC)
Please enter your callsign:wb4mak
```

Type **sh/dx** to list all the recent spots.



```
C:\ Telnet mackmc.dnsalias.com
Welcome to the Skimmer Server Telnet cluster port!
Skimmer Server v.1.1.0.99 is operated by Mack, WB4MAK
in GA (EM74UC)
Please enter your callsign:wb4mak
WB4MAK de SKIMMER 2010-03-07 15:03Z CwSkimmer >
sh/dx
18069.2 6V5WJ      07-Mar-2010 1458Z   13 dB  28 WPM  CQ      <WB4MAK-#>
7024.6  AA3EJ      07-Mar-2010 1454Z   35 dB  18 WPM  CQ      <WB4MAK-#>
7046.1  AB4KX      07-Mar-2010 1454Z   17 dB  23 WPM  DE      <WB4MAK-#>
7057.1  KD0U      07-Mar-2010 1458Z   15 dB  16 WPM  CQ      <WB4MAK-#>
7023.1  NN8R      07-Mar-2010 1502Z   11 dB  20 WPM  CQ      <WB4MAK-#>
18073.2  RU3EG      07-Mar-2010 1458Z    8 dB  25 WPM  CQ      <WB4MAK-#>
18073.2  RU3EG      07-Mar-2010 1448Z    8 dB  27 WPM  CQ      <WB4MAK-#>
18069.2  SP2HWW     07-Mar-2010 1459Z   14 dB  24 WPM  CQ      <WB4MAK-#>
7002.1  W7OE      07-Mar-2010 1452Z    5 dB  26 WPM  CQ      <WB4MAK-#>
14010.8  W7SW      07-Mar-2010 1501Z   26 dB  31 WPM  CQ      <WB4MAK-#>
14010.8  W7SW      07-Mar-2010 1451Z   25 dB  31 WPM  CQ      <WB4MAK-#>
WB4MAK de SKIMMER 2010-03-07 15:03Z CwSkimmer >
```

You should be able to see all the recent spots from your logging program or telnet session.

The dB signal relates to the signal to noise ratio at the antenna port of the receiver.

http://en.wikipedia.org/wiki/Signal-to-noise_ratio . A higher dB reading indicates a signal is further out of the noise and more decodable.

Here is what is behind the scenes at my shack:



The antenna is a long wire vertical at 75 ft with four long radials for omni-directional reception.

The antenna goes into a **RF Limiter / receiver protector** to prevent burning out the front end of the receiver when I transmit QRO from a separate antenna. <http://www.iceradioproducts.com/reonly.html>

The receiver is a Quicksilver QS1R <http://www.philcovington.com/QuickSilver/> . It is capable of receiving 192 kHz per band on seven bands simultaneously. I have it set up for the following bands right now:



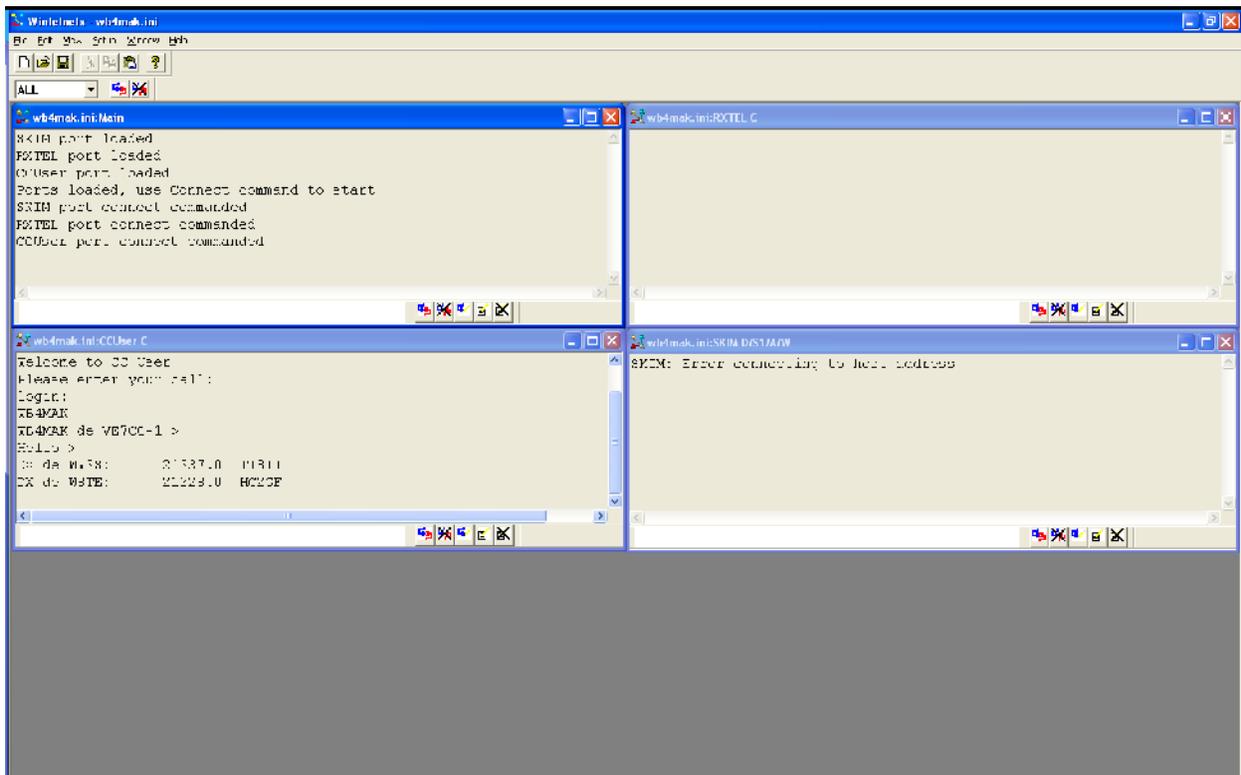
160M, 80M, 40M, 20M, 17M, 15M, 10M

The Quicksilver is feeding CWSkimmer Server <http://www.dxatlas.com/Download.asp> which has the ability to skim seven bands simultaneously for CW callsigns. I have it set to ONLY decode callsigns of people calling CQ . It is also set to “aggressive” callsign lookup. I’ve found the

accuracy to be 99%+. It will only report callsigns from hams calling CQ after it successfully decodes the callsign three times.

I have it set to run 24 hrs per day and there is 22 Mb of Internet bandwidth feeding the server. The server also feeds the Reverse Beacon Network (a collection of these receivers) which is a great place to compare how your signal is heard in various parts of the world. <http://reversebeacon.net/main.php>

Advanced Instructions. Once you have the basic server working properly, you can add one more layer of integration. You can use **WinTelnetX** to aggregate spots from various sources including Telnet and Packet into a single Telnet port on your computer. Be sure to study the example *.ini files provided with WinTelnetX. Attached are screen shots that show how I bring spots from CWSkimmer and VE7CC CCUser (filtered) spots into a single telnet port on my computer that my logging program connects to. If this is overly complex then don't bother with it until you need it. You absolutely *do not* need to run this program unless you want to aggregate spots from multiple sources. To automatically launch your custom *.ini edit the program icon start properties to **C:\download\WinTelnetX\deliver\wintelnetx.exe wb4mak.ini -start** as an example.



RX Net Connection Setup

RX Setup

Host Name or IP: 127.0.0.1
 Port Number: 23

General Port Setup

Name: RXTEL
 Is TNC: FALSE
 Stream Switch/ID: I A
 Buffer Size: 32000
 Keep Alive Time: 0
 Port Data Type: CT User
 MyCall: MYCALL
 Hops: 99
 CR/LF: 3 (0=none, 1=cr, 2=lf, 3=cr/lf)
 AntiLoop Px: <
 Dupes: 25

Block -@ spotters
 Strip -@ and -# from spotter call

Add Console Routes Automatically

OK Cancel

Net Connection Setup

Connection Setup

Host Name or IP: 127.0.0.1
 Port Number: 7302

General Port Setup

Name: CCUser
 Is TNC: FALSE
 Stream Switch/ID: I A
 Buffer Size: 32000
 Keep Alive Time: 0
 Port Data Type: Cluster User
 MyCall: INET
 Hops: 99
 CR/LF: 2 (0=none, 1=cr, 2=lf, 3=cr/lf)
 AntiLoop Px: <
 Dupes: 0

Block -@ spotters
 Strip -@ and -# from spotter call

Add Console Routes Automatically

OK Cancel

Net Connection Setup

Connection Setup

Host Name or IP

Port Number

General Port Setup

Name

Is TNC

Stream Switch/ID

Buffer Size

Keep Alive Time

Port Data Type

MyCall

Hops

CR/LF 0=none, 1=cr,
2=lf, 3=cr/lf

AntiLoop Px

Dupes

Block -@ spotters

Strip -@ and -# from spotter call

Add Console Routes Automatically

OK

Cancel